

Application No.: 09/833452
Docket No.: AD6728USNA

Page 9

REMARKS

The specification has been amended at Example 1, Paragraph [0178] to disclose that the ionomer in the polyethylene-ionomer blend of Bexloy[®]W720 is present in an amount of about 30 wt% (29.81%). Claims 1 and 43, the independent claims pending in the present application have been amended accordingly. Attached herewith is a Document marked as "EXHIBIT A", which document is entitled "PRODUCTION OF BEXLOY[®]W710 and 720 RESINS." The document, dated July 11, 1997, discloses the formulation of a product designated "AXW720 NC010." The formulation clearly shows that the ionomer of the formulation (Surlyn[®]) is present in an amount of about 30 wt% in the polyethylene-ionomer blend. The AXW720 NC010 is the Bexloy[®]W720 disclosed and used in the Examples of the present application. Since Bexloy[®]W720 of the Examples contains about 30 wt% of ionomer, the amendments to the specification and claims, accordingly, are fully supported by the original disclosure.

It is therefore respectfully submitted that the amendments of the specification and claim 1 accordingly, with respect to the amount of ionomer in the ionomer-polyethylene blend, add no new matter.

Claim 1 is amended to recite the first co-extruded layer is top or surface layer as disclosed in the specification. *See, e.g.*, pages 5 (lines 15-16), page 17 (lines 11-12), page 17(line 180) to page 19 (line 10), and page 24 (lines 5-8). *See also*, Tables 1, 3, 5, and 7; Example 6; and original claim 22.

New claims 54 and 55 recite the limitation of original claim 2.

New claims 56-59 recite the limitations disclosed in the specification such as, for example, page 12, lines 20-27.

New claims 60-65 recite the limitations disclosed on page 17 (lines 13-14).

Claims 66-68 recite the limitations disclosed on page 13 (line 16) to page 14 (line 5) of the specification.

Claims 69-72 recite the limitations presented in original claim 28.

New claims 73-82 narrow the scope of claims recited.

New claim 82 recites the limitations of original claim 51 while claims 83 and 84 recite the limitations of original claim 52.

Accordingly, the amendment does not introduce any new matter.

The Examiner has withdrawn claims 4, 7, 9, 11, 12, 14, 16-18, 20-42, 45, 47, 49, and 51 from consideration. Applicants respectfully request that, should the elected species be found allowable, the withdrawn claims will be considered and examined by the examiner and that applicants be afforded an opportunity to amend the withdrawn claims.

Application No.: 09/833452
Docket No.: AD6728USNA

Page 10

In the Amendment dated March 19, 2003, applicants, in response to the prior art cited in the Official Action of January 15, 2003, amended independent Claims 1, 7, 12, 43, 45, 47, and 49 to include the limitation of (c.) at least one additional third co-extruded polymeric layer in contact with said second co-extruded polymeric layer (hereinafter "the 3rd layer").

Upon further review of the art cited in the Office Action of January 15, 2003, applicants in good faith believe that the claims were unduly limited in the amendment submitted March 19, 2003, by the addition of the 3rd layer in the independent claims. Applicants believe in good faith that, without the addition of the 3rd layer for the reasons discussed below, the "2-layer" limitation as originally recited is patentable over the prior art. Of that group of claims, claims 1 and 43 are the independent claims still pending in the present application.

Applicants respectfully submit that the present Amendment is a *bona fide* attempt to advance the present application to allowance, pursuant to 37 CFR 1.111.

Claims 1, 3, 6, 43, and 52 were rejected under 35 USC 102(b) over Fanselow.

The rejection is respectfully traversed.

Fanselow discloses multilayer films and film-based assemblies, such as medical pump cassettes, which are suitable to replace conventional PVC films and assemblies. *See, e.g.,* Col. 2, lines 36-39. The film has, as disclosed in FIG. 1, at least a core layer (12), an outside surface layer (14), and an inside surface layer (16). These are also disclosed as 1st, 2nd, and 3rd layers, respectively. *See, e.g.,* Col. 9 (lines 39-40), Col. 10 (lines 17-20), and Col. 11 (lines 5-28).

At Col. 4, lines 9-15, Fanselow characterizes the respective thermoplastic polymers as follows: "The first thermoplastic polymer provides a film core with conformity and elasticity. The second thermoplastic polymer provides an outside surface layer with abrasion protection and non-stick release. The third thermoplastic polymer provides an inside surface layer with tensile strength and heat sealing ability (emphasis added)."

According to Fanselow at Col. 4, lines 58-63, "[T]he outside surface layer of the film based assembly provides a tough, protective coating for the assembly while the core layer provides the needed elasticity and flexibility. The inside surface layer provides not only toughness [as with the outside surface layer] but also is particularly adapted for heat bonding (emphasis added)."

Fanselow thus clearly discloses that the inside and outside surface layers of the films are of different composition since the inside surface layer, in addition to providing toughness, is "also particularly adapted for heat bonding."

Fanselow at Col. 4, lines 43-46, cited by the examiner, discloses that "the outside surface layer will be a non-stick or release olefin copolymer. A copolymer of ethylene and 1-octene or of ethylene and methacrylate is considered particularly suitable (emphasis added)."

Application No.: 09/833452
Docket No.: AD6728USNA

Page 11

Fanselow thus discloses the outside surface layer (14) as composed of ethylene-octene ("EO") or ethylene methacrylate ("EMAC") copolymers. By way of comparison, Fanselow discloses the inside surface layer (16) as an ionomeric ethylene-methacrylic acid copolymer doped with zinc or sodium ("EMAZ" or "EMAS"), such as SURLYN[®] copolymer. See Col.11, lines 17-27 and Col. 14, lines 63-67.

By further exemplification, Fanselow, at Example 1, discloses a trilayer film of a "top layer" consisting of EO, a core layer of a soft EVA and an "inside, heat-seal layer" of an ionomer resin that is a copolymer of ethylene and methacrylic acid doped with zinc ("EMAZ") (emphasis added).

There is thus no disclosure in Fanselow of a multilayer film or sheet wherein the top or surface layer ("outside surface layer" in Fanselow) consists essentially of ionomer, as called for by claims 1 and 43 of the claimed invention.

The Examiner acknowledged to this distinction on the record by specifically citing the description at Example 18, where "Fanselow et al specifically teach an example comprising a trilayer coextruded film comprising a [inside] surface layer consisting essentially of a SURLYN ionomeric resin coextruded with a core layer comprising a SURLYN resin blend [with "EMAC"] and an outer surface layer of ethylene methacrylate ["EMAC"] resin (emphasis applicants')."

It appears that the Examiner has thus acknowledged a clear distinction between Fanselow and the claims of the present invention. That is, there is no disclosure in Fanselow of a multilayer film comprising a "top or surface" layer consisting essentially of ionomer, as called for in claims 1 and 43. Fanselow discloses the inner surface layer of the multilayer film as consisting of an ionomer. The top or outer surface layer of Fanselow is an olefinic release resin, specifically copolymers of EO and EMAC.

It is therefore respectfully submitted that the claimed invention is not anticipated by Fanselow.

Claims 1, 3, 6, 43, and 52 were rejected under 35 USC 102(e) over Mientus. The rejection is also respectfully traversed.

Mientus discloses multilayered films of a core layer and skin layers. The core layer may be composed of a single thermoplastic polymer or a blend of the 1st polymer with a 2nd polymer. The 1st polymer is disclosed as a polyolefin having a density in the range of about 0.89 to about 0.97g/cc. See Col. 5, lines 23-25. The 2nd polymer may include, *inter alia*, ionomers derived from sodium, lithium or zinc. Col.3, lines 51-60.

At Col. 3, lines 63 to Col. 4, lines 1-3, with respect to the composition of the core layer, Mientus discloses that "...the concentration of the second thermoplastic polymeric material being from about 1% to about 25% preferably from about 2% to about 10% by weight based on the weight of the core layer. Unexpectedly, this combination of polyolefin

Application No.: 09/833452
Docket No.: AD6728USNA

Page 12

and a second polymeric material significantly improves the appearance of the film (emphasis added).” At Col. 5, lines 35-42, Mientus further discusses the amount of 2nd polymer in the core layer by disclosing that “[T]he concentration of the second thermoplastic material [in the core layer] is critical and is in the range of about 2% to about 25%... (emphasis added).”

Thus, Mientus discloses that the amount of 2nd polymer in combination with 1st polymer is critical and is used in an amount of from about 2 to about 25% at most.

As noted by the Examiner, Mientus discloses the use of SURLYN[®] as the 2nd polymer in the core layer in the Examples. In Examples 1-5, for instance, Mientus discloses the amount of SURLYN[®] in the core layer as 3%, 3%, 8%, 3%, and 3%, respectively.

At Col. 31, lines 1-7, Mientus teaches that “[S]everal second generation films were made, having different single component polyethylene resin (Dowlex and Affinity) in the pigmented core layer along with a small amount of Surlyn in the core layer for inter-layer adhesion. A noticeable improvement in the appearance of the jetness of the black was observed with the addition of a small amount of Surlyn in the core layer (emphasis added).” The “small amount” of Surlyn referred to in the core layer blend is 3%.

Hence, there is no disclosure or suggestion in Mientus of a multilayer film or sheet having a 2nd polymeric layer of an ionomer, as called for in the claimed invention. Nor is there disclosure in Mientus of a multilayer film or sheet having a 2nd polymeric layer of an ionomer-polyamide blend. Nor is there disclosure in Mientus of a multilayer film or sheet having a 2nd polymeric layer of an ionomer-polyethylene blend, wherein the ionomer in the blend is present in an amount of about 30 wt%.

It is therefore respectfully submitted that the claims are not anticipated by Mientus.

Applicants also submit the following remarks regarding the previous art cited by the examiner in the Office Action of January 15, 2003.

In the Office Action of January 15, 2003, Claims 1, 3, 4, 12, 14, 17, 18, and 21 were rejected under 35 U.S.C. 102(b) as being anticipated by JP 56-146758 (“JP ‘758”).

JP ‘758 discloses a plastic laminate food wrap of two layers: (A) a mixture of 50-90 wt % of polyamide and 50-10 wt % of olefin-based ionomer, and (B) an olefin-based ionomer.

The two layers of JP ‘758 are extruded separately. That is, they are no co-extruded, as recited in the claimed invention.

Further, there is no disclosure in JP ‘758 of a top layer consisting essentially of ionomer, as called for by claim 1. The top layer (“A”) of JP ‘758 is a mixture of 50-90 wt % polyamide and 10-50 wt % of olefin-based ionomer. Nor is there disclosure in JP ‘758 of either the first or second layer of the film or sheet containing pigments, dyes, and flakes, or mixtures thereof, as called for in claim 1.

As such, the claimed invention is not anticipated by JP ‘758.

Application No.: 09/833452
Docket No.: AD6728USNA

Page 13

Furthermore, the subject matter of the pending claims is unobvious in view of JP '758 under 35 USC 103(a). In addition to the above discussed differences, there is nothing in the teaching of JP'758 directed to a nominal 100 micron thick plastic laminated food wrap that would lead one of ordinary skill in the art to applicants' claimed invention.

It is therefore respectfully submitted that present claims are patentable over JP'758.

Claims 7, 9, and 45-46 were rejected under 35 USC 102(b) or 103(a) as being anticipated by JP 03024954 ("JP'954"). The rejection is respectfully traversed.

JP'954 discloses a peelable seal comprising a gas barrier layer made from PVDC; a seal layer formed from VLDPE or a mixture of VLDPE and LLDPE; an intermediate layer selected from polyamide, thermoplastic polyester and an ionomer; and an outer layer of an olefinic resin.

The outer layer of JP'954 is an olefin. There is no disclosure in JP'954 of a multilayer film or sheet having a top layer consisting essentially of ionomer, as required in the claimed invention. Nor is there disclosure in JP '954 of either the first or second layer of the film or sheet containing pigments, dyes, and flakes, or mixtures thereof, as required in the claims.

Therefore the claims are not anticipated by JP'954.

There is nothing in the teaching of JP'954 directed to a peelable seal having alleged "improved opening properties, heat resistance, and stretchability" by forming a gas barrier layer made from PVDC and the seal, intermediate, and outer layers, as described above, that would lead one of ordinary skill in the art to applicants' claimed invention.

Therefore the present claims are patentable over JP'954 under 103(a).

Claims 7-11, 45-46, 51, and 53 were rejected under 35 USC 102(b) or 103(a) over Lee (US5,643,999). However, Lee discloses polyethylene-based ("PE") adhesive compositions for forming durable bonds to ionomer for packaging applications, where the adhesive composition is a blend of 1st and 2nd PE polymers with an elastomer. At Col. 8, lines 31-34, there is disclosed three layer laminates of HDPE/adhesive/ionomer or EVA copolymer/adhesive/ionomer.

There is no disclosure in Lee of a multilayer film or sheet having a top layer consisting essentially of ionomer, as called for by present claims. Lee discloses multilayer structures comprising at least one barrier or outer layer (HDPE or EVA copolymer in the Examples) bonded to an ionomer layer by way of the adhesive compositions of Lee. See Col. 3, lines 5-7 and Col.8, lines 31-34.

There is no disclosure in Lee of either the first or second layer of the film or sheet containing pigments, dyes, and flakes, or mixtures thereof, as called for by the present claims.

Therefore the present claims are not anticipated by Lee

Application No.: 09/833452
Docket No.: AD6728USNA

Page 14

The pending claims is also unobvious over Lee because there is nothing in the teaching of Lee directed to providing PE-based adhesive compositions ideally suited to providing durable bonds between barrier layers and ionomer resins in packaging applications, as disclosed above, that would lead one of ordinary skill in the art to Applicants' claimed invention.

Claims 12-16, 47-48, and 51-53 were rejected under 35 USC 102(b) or 103(a) as over EP 1 041 110 ("EP'110").

EP'110 discloses resin type interior materials (floor material, skirt) which can be substituted for environmentally-unfriendly PVC interior materials. At Paragraph [0064], the skirt composition is disclosed as comprising 10 to 45 parts EVA, 55 to 90 parts of polyolefin and 150 to 400 parts inorganic filler. At Paragraph [0065], the surface layer of ionomer is disclosed as "sheet-formed using another extruder and immediately after that, the resulting sheet is laminated over the skirt."

There is thus no disclosure in EP'110 of a multilayer film or sheet having a co-extruded top layer consisting essentially of ionomer, as called for by the present claims. The surface ionomer layer of EP'110 is separately sheet-formed and then laminated over the skirt.

There is no disclosure in EP'110 of a multilayer film or sheet of 1st and 2nd co-extruded layers consisting essentially of ionomer and ionomer and blends thereof, respectively.

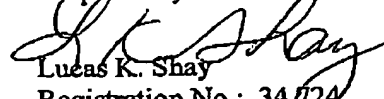
And there is no disclosure in EP'110 of either the first or second co-extruded layers of the film or sheet containing pigments, dyes, and flakes, or mixtures thereof, as called for by Claims 1 and 43.

Therefore, the present claims are not anticipated by EP'110.

Nor are the present claims unobvious over EP'110 because there is nothing in the teaching of EP'110 directed to providing EVA-based copolymer compositions that are especially suited to providing substitute "interior materials", such as flooring, for such materials conventionally made of PVC, as disclosed above, that would lead one of ordinary skill in the art to applicants' claimed invention.

In Summary, it is respectfully submitted that applicants have clearly demonstrated that the "2-Layer" limitation of the present claims are patentable over the prior art cited in the Office Action of January 15, 2003.

Respectfully submitted,


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Attachment: EXHIBIT A